

## WE CLAIM:

1. A shearable connector for joining two coupling members and transferring a desired torque therebetween, said shearable connector comprising an elongate bolt element having:
- 5 a middle portion forming a shearable sector of a given shear strength;
- a shoulder element on either side of said middle portion for abutting a respective coupling member to provide a pre-set clearance between at least a portion of said coupling members when joined; and,
- 10 an end portion extending from each of said shoulder elements and having a threaded part for receiving a nut member thereon for clamping said bolt element to said coupling members.
2. The connector of claim 1 wherein said end portion includes an intermediate portion between said shoulder element and said threaded part adapted to slideably engage said coupling member in a desired orientation.
- 15 3. The connector of claim 2 wherein said intermediate portion includes opposed planar portions to prevent rotation of said bolt element during installation and removal of said nut member.
- 20 4. The connector of claims 1, 2 or 3 further including a washer element having an aperture therein for insertion onto said end portion between said nut member and said coupling member, wherein the location of said aperture in said washer element may be changed to alter the radial spacing of said bolt element from the radial centre of said coupling members.
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5. The connector of claim 4 wherein said shoulder element has a greater diameter than that of said middle and end portions for sandwiching said coupling member between said shoulder element and said washer element.

5 Sub A2 > 6. A shear bolt for joining coupling members comprising:

an elongate core element having a first portion forming a shear area of a given shear strength, a second portion on each side of said first portion forming a shoulder of larger diameter than said first portion and adapted to provide a pre-set spacing between opposed coupling members at least in the vicinity of said shear bolt, and a third portion extending from each of said shoulders adapted to receive a fastening member to secure said core element with said coupling members.

7. The shear bolt of claim 6 wherein said third portion includes an shaped part adjacent said second portion for slideably engaging a coupling member transversely thereto.

8. The shear bolt of claim 7 wherein said shaped part includes opposed planar surfaces to avoid rotation of said core element during installation and removal of said fastening member.

9. The shear bolt of claims 6, 7 or 8 further including a washer element having an opening for insertion onto said third portion and adapted to register with a correspondingly shaped recess in a coupling member, wherein the location of said opening in said washer element provides a means of adjusting the spacing of said bolt element from a given radial reference point of said coupling members.

Sub A5> 10. A shear bolt coupling assembly comprising:  
a first coupling member with a first radially extending flange;  
a second coupling member located coaxially with said first coupling member  
and having a second radially extending flange; and,  
5 an elongate shear bolt having a first portion forming a shear area of a given  
shear strength, a second portion on each side of said first portion forming a shoulder  
of larger diameter than said first portion for abutting each of said first and second  
flanges to provide a desired clearance therebetween, and a third portion extending  
10 from each of said shoulders adapted to receive a fastening member to secure said  
shear bolt with said first and second flanges, thereby securely connecting said first  
and second coupling members for transferring a shear force therebetween up to said  
given shear strength.

Sub A6> 11. The assembly of claim 10 wherein said third portion includes a shaped part  
15 adjacent said second portion for slideably engaging a respective first or second flange  
transversely to a longitudinal centreline of said first and second coupling members.

12. The assembly of claim 11 wherein said shaped part includes radially opposed  
planar surfaces adapted to engage a respective first or second flange to avoid rotation  
20 of said shear bolt during installation and removal of said fastening member.

Sub A7> 13. The assembly of claims 10, 11 or 12 further including a washer element  
having an opening for insertion onto said third portion and adapted to register with a  
correspondingly shaped recess in a respective first or second flange, wherein the  
25 location of said opening in said washer element provides a means of adjusting the  
radial spacing of said shear bolt from a given radial reference point of said first and  
second coupling members.

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